

REMARKS

Review and reconsideration of the above-identified application and claims in view of Applicants' amendment and remarks are respectfully requested. Applicants herein amend Claim 1 for clarity, and such amendment is supported in the specification and claims as filed. Withdrawn claim 31 is cancelled to further prosecution. Claims 1-30 are pending.

Consideration of the amendments and remarks after final is proper under 37 C.F.R. §1.116 because 1) the amendment does not add new matter; 2) the amendment does not require further search or consideration; 3) the remarks clarify issues previously presented; 4) the amendment and remarks place the application in better condition for appeal, should an appeal be necessary; and 5) the amendment and remarks place the application in condition for allowance. Entry and consideration of the amendment and remarks is thus respectfully solicited.

The Restriction Requirement was made final. Applicants herein cancel non-elected claim 31 to further prosecution.

Claims 1 and 3-30 were rejected under 35 U.S.C. §103(a) over Guire et al. (U.S. Pat. Appl. Pub. 2003/0073086 A1). Claim 2 was rejected under 35 U.S.C. §103(a) over Guire et al. in view of Nova (U.S. Pat. 6,340,588 B1). For at least the following reasons, Applicants traverse the rejection.

The Office Action states that Guire et al. teaches a method of making microarrays by immobilizing microparticles on a support, wherein the microparticles are trapped in a receiving layer which is then cross-linked by activation of a cross-linking agent. The Office Action asserts this cross-linking is a sol/gel transition. The Office Action states that Nova teaches a method of coating matrix materials on supports with bioactive agents, wherein the matrix material can be cellulose, gelatin, or dextran.

The invention is directed towards a method of making a microarray, wherein the method includes:

- providing a support;
- coating on the support a receiving layer to receive microspheres;

- coating on the receiving layer a dispersion of microspheres in a carrier fluid, wherein the carrier fluid contains at least one crosslinking agent;
- allowing the microspheres to partially submerge into the receiving layer;
- inducing sol/gel transition by thermal gelation of the receiving layer, thus immobilizing the microspheres;
- evaporating off the carrier fluid; and
- allowing crosslinking reaction between the receiving layer and the crosslinker in the carrier fluid.

As claimed, two separate bonding steps are necessary to bond the microspheres in the receiving layer to the support. The first step comprises sol/gel transition of the receiving layer to immobilize the microspheres and prevent movement thereof during subsequent evaporation of the carrier fluid. The second step, after evaporation of the carrier fluid, comprises crosslinking the receiving layer to complete immobilization of the microspheres in the receiving layer. The immobilization is done in two steps, before and after evaporation of the carrier fluid, in order to maintain the relative positions of the microspheres on the support.

Guire et al. does not disclose or suggest a two-part bonding of the microspheres in a receiving layer. Guire et al. immobilizes the microspheres in a single step by crosslinking of an immobilization material, or by interaction of two or more reactive mobilization materials, as found in a binding pair. See paragraphs 0085 and 0099, and examples. Guire does not disclose or suggest two separate bonding steps separated by evaporation of a microparticle carrier fluid in order to bond the microparticles to a support and immobilize them.

Nova does not cure the deficiencies of Guire et al. because Nova does not disclose or suggest two separate bonding steps separated by evaporation of a microparticle carrier fluid.

For at least the above reasons, reconsideration and withdrawal of the rejections under 35 U.S.C. §103(a) over Guire et al., and Guire et al. in view of Nova, are in order and respectfully requested.

Applicants submit all of Claims 1-30 are in condition for allowance. Prompt and favorable action is respectfully requested.

Should the Examiner require anything further, or have any questions, the Examiner is asked to contact Applicants' undersigned representative.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Kathleen Neuner Manne', written over a horizontal line.

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